



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/920,750 | 08/03/2001 | Jeffrey H. Diamond | 0136.0003C | 5953 |

7590 07/25/2005

EPSTEIN & GERKIN
1901 RESEARCH BOULEVARD
SUITE 340
ROCKVILLE, MD 20850-3164

EXAMINER

A, PHI DIEU TRAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3637

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,750

Applicant(s)

DIAMOND, JEFFREY H.

Examiner

Phi D. A

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-24, 28-39, 51-56 and 59-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-24, 28-39, 51-56 and 59-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/9/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, 19, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe (JP2001152678).

Ohayon shows stabilized window structure (the structure to the mirror glass meets the claimed limitations to the window structure and thus read on the window structure) comprising a window frame (mirror housing), a shattered window pane (figure 1) disposed in the window frame and having an exterior surface and an exposed interior surface (exposed to part 64 of figure 6) circumscribed by the window frame, the interior surface being opposite the exterior surface, a layer of unifying material (the removable adhesive tape) adhesively bonded by itself directly (after being put in contact with the pane) to a substantial portion of at least one of the exterior surface or said interior surface, the layer of unifying material and the window pane bonded thereto forming an integral, rigid cohesive mass in which the shattered window pane is structurally united by the unifying material, the mass being removable from the window frame as one or more integral and unitary pieces, the window pane being non-planar (page 12 line 1), the frame is disposed in a vehicle, the layer of unifying material is disposed over substantially the entirety of the at least one of the exterior surface.

Ohayon does not disclose the adhesive tape being a sprayed on fluidic solidifiable layer.

Watanabe discloses spraying adhesive on a window pane in a fluidic form, solidifying the adhesive to bond itself to the window pane after being applied.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's structure to show the adhesive tape being a sprayed on fluidic solidifiable layer because using sprayed on fluidic solidifiable layer would enable the easy quick covering bond of a variety of surface sizes without having to predetermine the needed tape dimension for the surfaces.

Ohayon as modified shows the layer solidifying after being applied to the pane surface, the layer of unifying material being capable of being sprayed onto the window pane in a fluidic form and solidifying on the window pane to adhesively bond itself to the window pane, the adhesive being disposed within the crack.

3. Claims 6-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe (JP2001152678).

Ohayon as modified shows all the claimed limitations except for the polymeric material being polymeric foam including polyurethane, polyethylene, or polystyrene, the polymeric material being a polymeric film including polyvinyl, a latex, polyurethane, acrylate or cellophane, the material being cellulosic material.

Watanabe further discloses the adhesive being basic adhesive material with a foaming agent.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's modified structure to show the adhesive being a polymeric material, the polymeric material being a polymeric foam including polyurethane, polyethylene,

Art Unit: 3637

or polystyrene, the polymeric material being a polymeric film including polyvinyl, a latex, polyurethane, acrylate or cellophane, the material being cellulosic material because using adhesive with a foaming agent to bond glass together would enable the secure bonding of the glass with the adhesive as taught by Watanabe, and examiner takes Official Notice of the equivalence of adhesive disclosed by Watanabe and a polymeric material, the polymeric material being a polymeric foam including polyurethane, polyethylene, or polystyrene, the polymeric material being a polymeric film including polyvinyl, a latex, polyurethane, acrylate or cellophane, the material being cellulosic material, for their use in the glass surface bonding art and the selection of any of these known equivalents to bond the shattered pane would be within the level of ordinary skill in the art.

4. Claims 28-32, 35, 39, 51-55, 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe (JP2001152678).

Ohayon as modified shows all the claimed limitations. The claimed method steps would have been the obvious method steps of stabilizing and removing the window pane from the frame with Ohayon's modified structures.

5. Claims 20-21, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073).

Ohayon shows stabilized window structure (the structure to the mirror glass meets the claimed limitations to the window structure and thus read on the window structure) comprising a window frame (mirror housing), a shattered window pane (figure 1) disposed in the window frame and having an exterior surface and an interior surface exposed by the window frame, the interior surface being opposite the exterior surface, a layer of unifying material (the removable

Art Unit: 3637

adhesive tape) adhesively bonded by itself directly (after being put in contact with the pane) to a substantial portion of at least one of the exterior surface or said interior surface, the layer of unifying material and the window pane bonded thereto forming an integral, rigid cohesive mass in which the shattered window pane is structurally united by the unifying material, the mass being removable from the window frame as one or more integral and unitary pieces.

Ohayon does not disclose at least one grasping member having a handle secured and bonded to the cohesive mass.

Ohayon further discloses a handle/grasping member (20) for moving a window pane by adhering the handle to the window pane.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's structures to show at least one grasping member having a handle secured and bonded to the cohesive mass because the handle/grasping member would enable the easy removal of the shattered glass once broken from the frame without having the hand directly grab the cohesive mass and thus preventing potential broken glass cutting the hand.

Per claims 36, 38, Ohayon as modified shows all the claimed structural limitations. The claimed method steps would have been the obvious method steps of stabilizing and removing the window pane from the frame with Ohayon's modified structures.

6. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe (JP2001152678).

Ohayon as modified shows all the claimed limitations except for the unifying material being applied in fluidic form, the material solidify by curing to bond the glass to the adhesive.

Watanabe further discloses applying adhesive on a window pane in a fluidic form, solidifying the adhesive to bond itself to the window pane after being applied.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's modified structure to show the adhesive tape being a fluidic solidifiable layer because using fluidic solidifiable layer would enable the easy quick covering bond of a variety of surface sizes without having to predetermine the needed tape dimension for the surfaces.

Ohayon as modified shows all the claimed structural limitations. The claimed method steps would have been the obvious method steps of stabilizing and removing the window pane from the frame with Ohayon's modified structures.

7. Claims 56, 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe.

Ohayon shows protected window pane, comprising a window pane (figure 1) having a perimeter mounted in a window frame, the window pane having an exposed exterior surface and an exposed interior surface (exposed to the part 64) circumscribed by the frame, a layer of adhesive (the tape) adhered to at least a substantial portion of the exterior surface to provide protection to the window pane, the layer and the window pane forming a protected window pane.

Ohayon does not disclose the layer being a polymeric foam, one or more handles secured to the protected window pane by adhesion of the one or more handles with the foam, the adhesion between the foam and the window pane and between said one or more handles and the foam is provided by the foam itself and is of sufficient strength to allow the window pane to be

Art Unit: 3637

remove from the frame by manually pulling on said one or more handles without detaching the foam from the window pane.

Ohayon further discloses a handle/grasping member (20) for moving a window pane by adhering the handle to the window pane.

Watanabe discloses applying a polymeric foam layer to a window pane to form a protected window pane by adhesion of the foam to the window pane.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's structures to show the layer being a polymeric foam, one or more handles secured to the protected window pane by adhesion of the one or more handles with the foam, the adhesion between the foam and the window pane and between said one or more handles and the foam is provided by the foam itself because handles would enable the easy removal of the shattered glass once broken from the frame without having the hand directly grab the cohesive mass and thus preventing potential broken glass cutting the hand, and having the polymeric foam layer would enable the easy quick covering bond of a variety of surface sizes without having to predetermine the needed tape dimension for the surfaces.

Ohayon as modified shows the adhesion between the foam and the window pane and between said one or more handles and the foam is provided by the foam itself and is of sufficient strength to allow the window pane to be removed from the frame by manually pulling on said one or more handles without detaching the foam from the window pane, the layer permanently adhered to the window pane and the one or more handles are permanently adhered to the layer by the adhesion provided by the foam.

Art Unit: 3637

8. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohayon (GB2208073) in view of Watanabe.

Ohayon as modified shows all the claimed limitations except for the one or more handles including plurality of handles.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ohayon's modified structure to show the one or more handles including a plurality of handles because it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art; *St. Regis Paper Co. v. Bemis Co.* 193 USPQ 8.

Response to Arguments

9. Applicant's arguments filed 5/10/05 have been fully considered but they are not persuasive.

10. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to applicant's arguments that Ohayon does not teach the glass being shattered to the point of losing its structural integrity or connectivity, the argument is moot, as it is not claimed. Furthermore, as is consistent with applicant's disclosure, applicant's glass does have connectivity or structural integrity, otherwise, there is no glass surface to attach the adhesive thereto.

With respect to applicant's arguments that a person seeking to solve the problem of safely stabilizing or removing any types of shattered window panes without limitations on size, weight, would not find a solution in Ohayon, examiner respectfully disagrees. First of all, Ohayon solves the problem of removing a piece of damaged glass pane without the glass shattering and creating problems. A person wishing to remove a damaged glass pane would see that Ohayon solves the issue. Secondly, when applicant refers to weight and size, it is unclear what kind of weight and size is referred to, as they are not claimed. Thirdly, a person seeking to remove the cracked/damaged glass, would find that the teaching of Ohayon provides the solution to the problem and would be able to properly apply to the specific application.

With respect to Watanabe, examiner respectfully points out that the reference teaches the use of a foam material to hold glass together before the glass is demolished. Ohayon discloses a tape to hold glass together before the glass is demolished. The combination of the references thus would result in Ohayon having a foam adhesive layer holding the damaged glass together before being demolished. Using foam instead of a taper also would provide the quick and easy covering and bonding of a variety of surface sizes without having to predetermine the needed tape dimension for the surfaces. The modification is thus motivated. With respect to applicant's statements that the combination would result in Ohayon's structure not working, examiner respectfully disagrees. As modified by Watanabe, Ohayon's modified structure would properly function with the foam adhesive bonding to the shattered glass. The foam adhesive also would function to hold the shattered glass together for removal without the shattered glass breaking into detached multiple pieces. The modified structure can also be removed from the frame as disclosed. The argument is thus moot.

With respect to applicant's statement to cohesive mass and its bonded strength to the glass pane, examiner respectfully points out that Ohayon as modified shows the claimed adhesive strength. There is nothing in the cohesive mass of Ohayon as modified by Watanabe that prevents the reference from functioning as claimed. The function of the cohesive mass is to hold the shattered glass together when the damaged glass is shattered. The modified structure with the cohesive mass is able to function as intended. The argument is thus moot.

With respect to applicant's argument to "an integral, rigid cohesive mass", examiner respectfully points out that Ohayon as modified by Watanabe shows an integral rigid cohesive mass when the adhesive cures. When shattered, the glass would be removed along with the cohesive mass from the frame. The combination of the references teach all the claimed limitations and able to function as intended. The argument is thus moot.

With respect to claims 2 and 4, the arguments are moot as the claims are withdrawn from consideration.

With respect to claims 6-17 to different materials, examiner respectfully points out that the use of the different claimed material would be obvious as they are equivalent to the foam adhesive taught by Watanabe, and the use of the different adhesive would not destroy the intended function of smashing the shattered glass henceforth. Having a layer of foam adhesive on the surface of the damaged glass would not prevent a person from shattering the glass for removal. Also, a solidified polymeric foam would not prevent a person from inserting a tool behind the mirror glass to forcefully pry it away from the carrier tray. Once shattered, the cohesive mass and the glass would provide room for such function as needed. The argument is thus moot.

With respect to claim 19, Ohayon as modified shows the foam cohesive mass covering the surface of the damaged glass. The mass is sprayed over the surface in fluidic foam before curing. In the liquid form, the mass when sprayed upon the surface would naturally seeps into the cracks and bonding thereof. The claim also does not require the adhesive to completely fills the cracks. Having the adhesive in the cracks also serve the hold the shattered glass together when smashed. The argument is thus moot.

Claims 23 and 24 are withdrawn from consideration. The argument is thus moot.

The arguments to claims 28-32,35, 39, 51-55 is also moot in view of the arguments presented above. The references when combined shows all the claimed structural limitations, and the method steps would have been the obvious method steps of stabilizing and removing a window pane from the frame of Ohayon's modified structure.

Claims 33 and 34 are withdrawn from consideration. The argument is thus moot.

With respect to claim 56, Ohayon as modified shows all the claimed limitations. The argument is thus moot.

With respect to claims 60-63, Ohayon as modified by Watanabe shows all the claimed limitations. The claimed method steps would have been the obvious method steps of stabilizing and removing a window pane from the frame of Ohayon's modified structure.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

Art Unit: 3637

applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Tuesday, Thursday and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of a series of loops and a large circular flourish at the end.

Phi Dieu Tran A

7/21/05